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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

11/26/2003

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EXAMINER

NGUYEN, CAM N

ART UNIT

PAPER NUMBER

1754

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,365

Applicant(s)

EL-SHALL ET AL.

Examiner

Cam N Nguyen

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1-30 is/are allowed.
- 6) ☐ Claim(s) 31-33,35,36 and 38 is/are rejected.
- 7) ☐ Claim(s) 34 and 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/7/02 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7/25/02 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102(b)

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 31-33, 35-36, & 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Mesters et al., "hereinafter Mesters", (US Pat. 4,711,773).

Mesters discloses catalysts consisting essentially of a refractory oxidic carrier, copper, and zinc (see col. 10, claim 1). The particle size of the metallic copper is less than 20 nm (see col. 4, ln 1-11).

Mesters discloses the claimed nanosized particle of Cu/Zn alloy or supported catalyst structure, thus anticipates the claims.

Product-by-process limitations in the claims is noted. While the product of the reference is not made by the same process, the product made is the same as claimed. See *In re Thorpe*, 227 USPQ 964 (Fed. Cir. 1985); *In re Brown*, 173 USPQ 688, 688 (CCPA 1977); *In re Fessman*, 180 USPQ 324, 326 (CCPA 1977). See also *MPEP* 2113.

Allowable Subject Matter

3. Claims 34 & 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 1-30 are not being rejected under the art rejection because they contain allowable subject matter. The following is the statement of reason(s) for allowance of the claimed subject matter.

The prior art does not disclose or fairly suggest a method of making nanoparticles of a copper/zinc alloy requiring vaporizing the one or more targets by subjecting each of the one or more targets to a beam of laser energy to form a vapor. While the US Pat. 5,695,617 to Graiver et al. teaches a method of producing nanoparticles discloses this vaporizing step using the laser beam technique, it does not teach to produce the nanoparticles of copper/zinc alloy, copper (Cu), or zinc (Zn).

There is no motivation to combine the teachings of the references together.

Citations

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pratsinis et al. (US Pat. 6,254,940 B1), Langner et al. (US Pat. 5,817,855), Pohl (US Pat. 6,080,699), Streckel et al. (US Pat. 5,306,328), Klar et al. (US Pat. 4,504,597), Wainwright et al. (US Pat. 4,349,464), Goretti et al. (US Pat. 4,363,752), Kim et al. (US Pat. 4,131,453), Breedis et al. (US Pat. 6,632,300 B2), Brook et al. (US Pat. 4,067,752),

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Tomikawa et al. (US Pat. 5,286,444), Mueller et al. (US Pat. 5,766,377), Pavate et al. (US Pat. 6,391,163 B1), & Gaag et al. (US Pat. 5,658,401) are cited for related art.


Conclusion

6. Claims 1-38 are pending. Claims 31-33, 35-36, & 38 are rejected. Claims 34 & 37 are objected. Claims 1-30 are allowed.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cam Nguyen, whose telephone number is (703) 305-3923. The examiner can normally be reached on M-F from 8:30 am. to 6:00 pm, with alternative Monday off.


The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 (before finals) and (703) 872-9311 (after-final).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Cam Nguyen

Primary Examiner

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Nguyen/cnn 

November 21, 2003